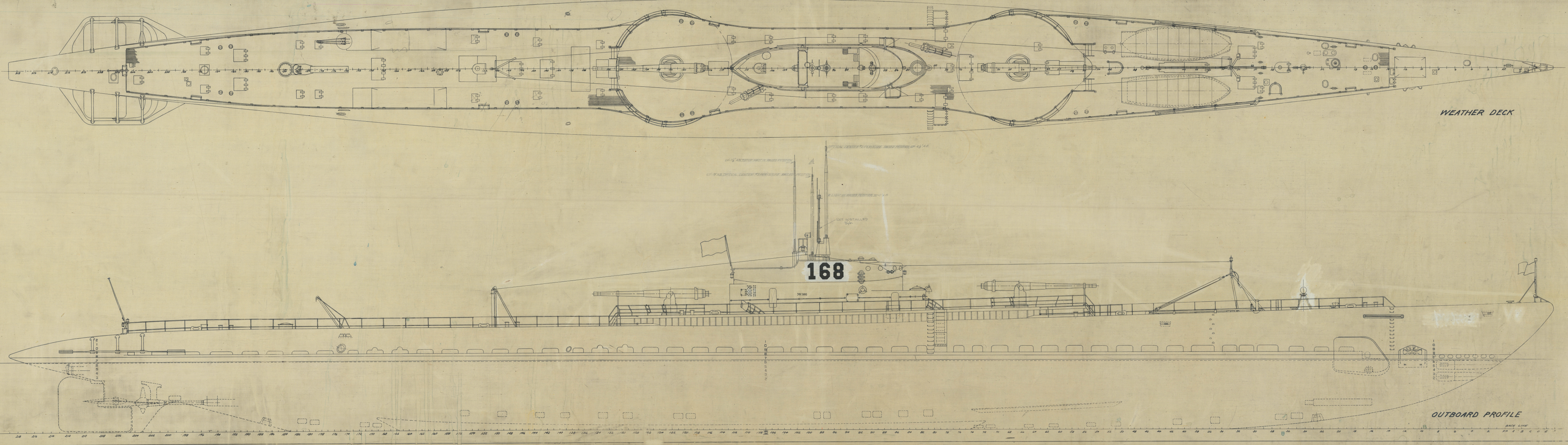

WEATHER DECK
168
64'-7⅜" A.B. TOP OF MAST IN RAISED POSITION
60'-9" A.B. OPTICAL CENTER #3 PERISCOPE RAISED POSITION
OPTICAL CENTER #2 PERISCOPE RAISED POSITION, 68'-4⅛" A.B.
℄ LIGHT IN RAISED POSITION 35'-0" A.B.
A
NOT INSTALLED
7/10/42
OUTBOARD PROFILE

ALTERATIONS

MARK	DESCRIPTION	BY	DATE	APPROVED
A	ELIMINATE NO 1 PERISCOPE, LENGTHEN NO 2 PERISCOPE TO 40 FT., INSTALL ADDITIONAL MAST FOR MAST HEADLIGHT, SUBSTITUTE VERTICAL HOUSING RADIO ANTENNAE MAST FOR RADIO MAST, INSTALL WING ANTENNAE	R.J.H. Mare Island	7/31/41	

NBC

PLAN ONLY PARTLY CORRECTED DURING MODERNIZATION AT M.I. - SEE M.I. PLS. 55415 & 52621 10/1/42

V.F.

SS167 / S1-3
SS168 / S1-3
3180235/46

THIS PLAN CONVERTED FROM PORTSMOUTH PLAN № 1473-SC1

U.S.S. NAUTILUS S.S. 168

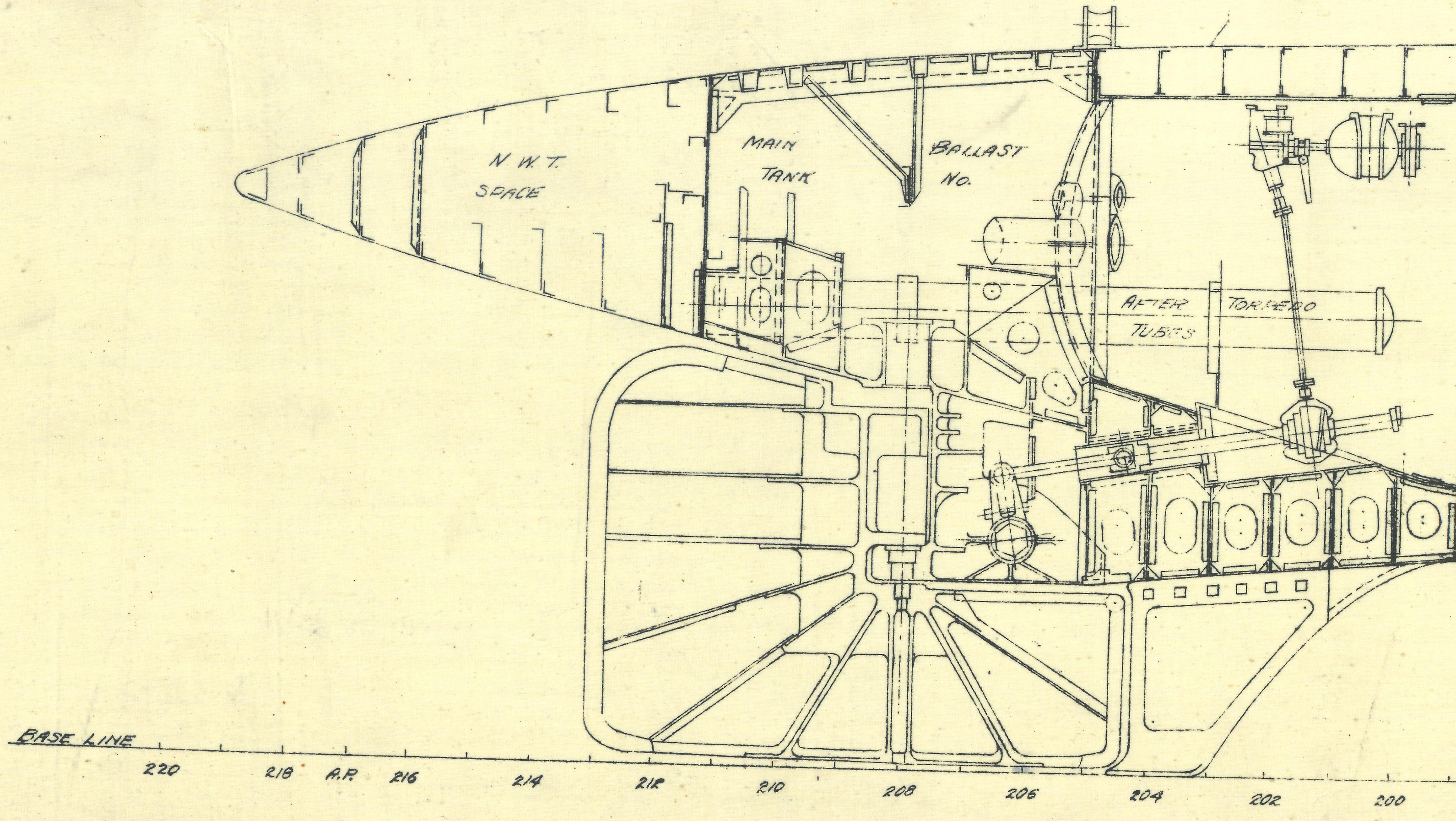
OUTBOARD PROFILE AND WEATHER DECK

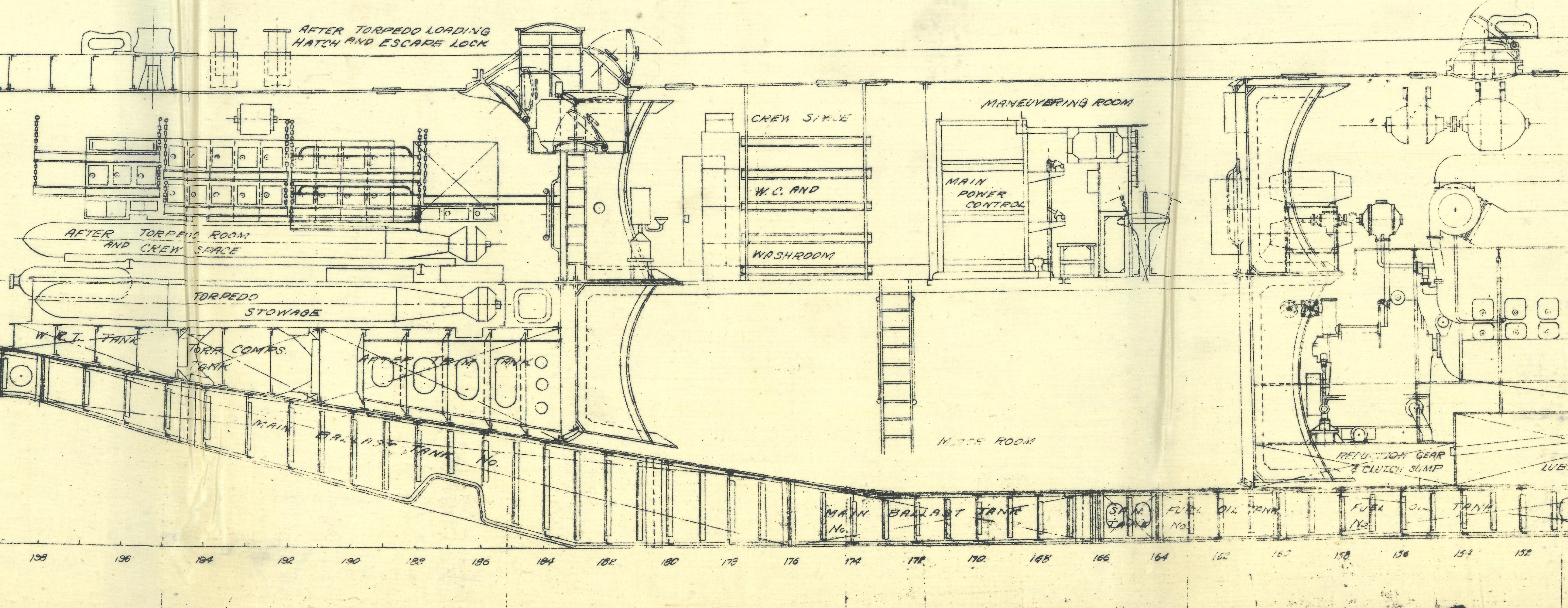
H. V. B. McFadden LIEUT (J.G.)(CC) U.S.N.
ACTING DESIGN SUPERINTENDENT

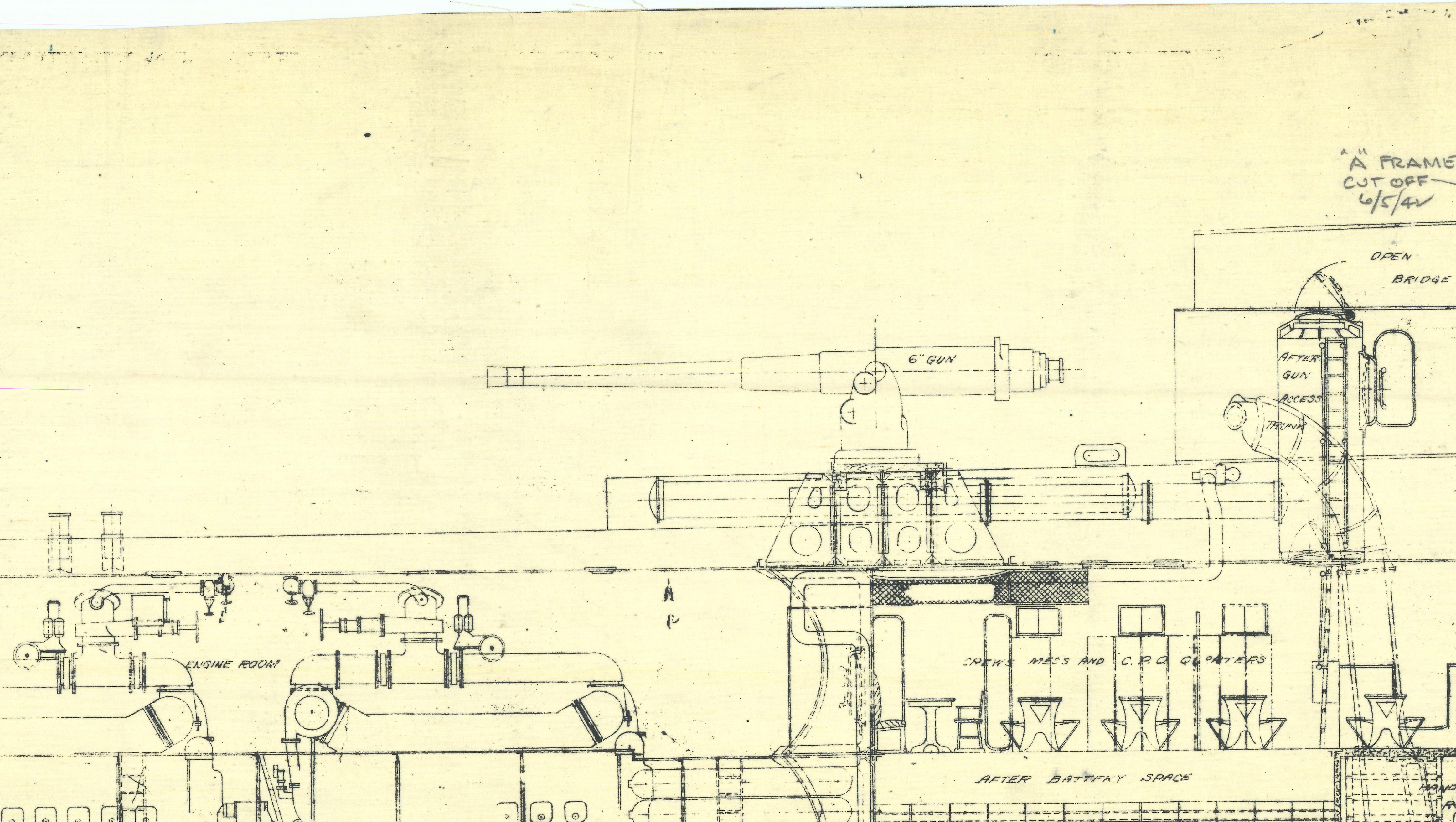
DELINEATOR - CONVERTED BY D.M.B.	CHIEF DRAFTSMAN N. B. Brown.
CHECKER C.P.Y.	SCALE ¼" = ONE FOOT
SUPERVISOR J. B. Lanham	DATE AUGUST 28, 1931
BUREAU C.& R.	U.S. NAVY YARD, MARE ISLAND, CALIF.
№ 159894	№ 40062

2 BP Bu Ships

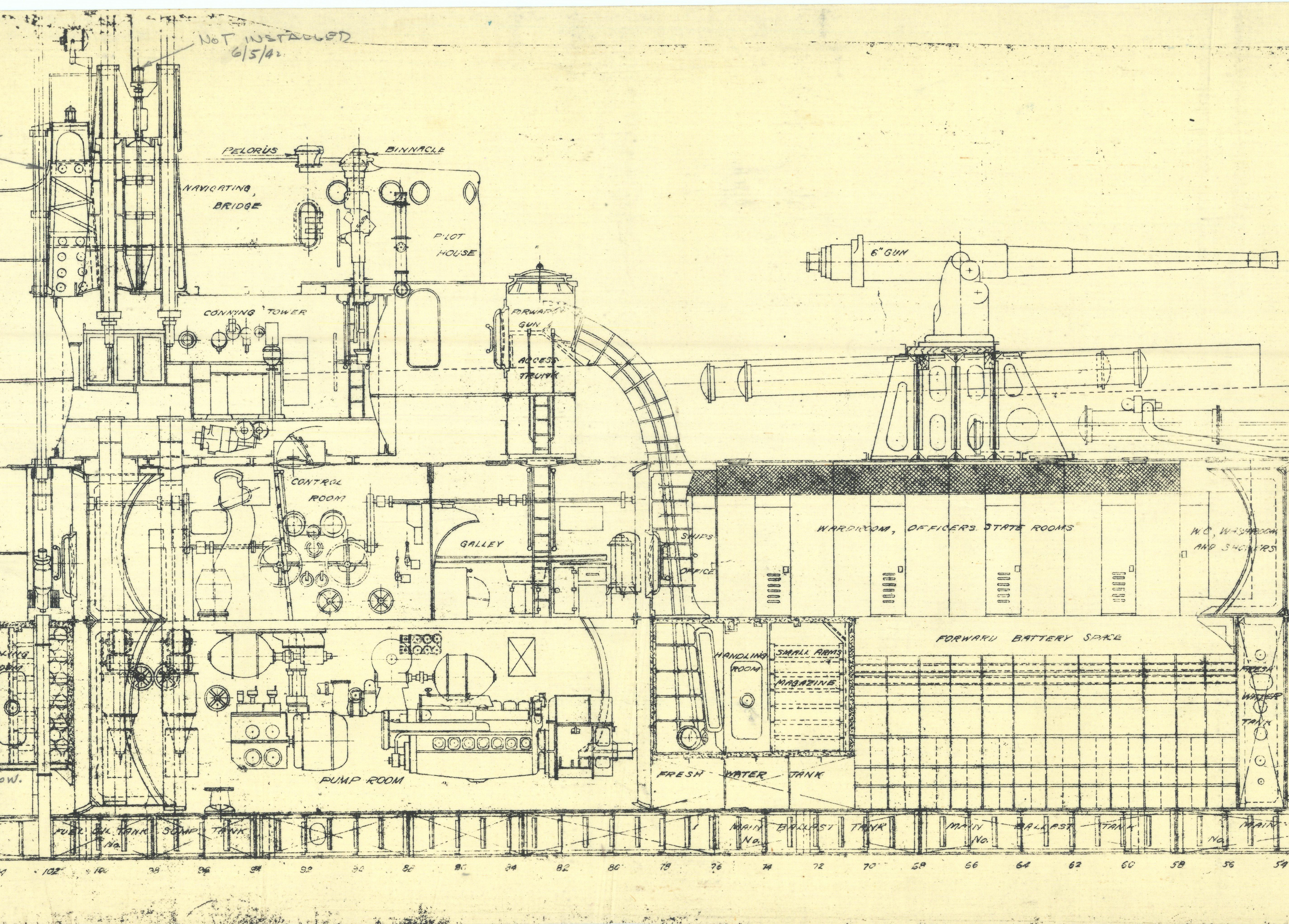
S S168 / S1-3
S11-6

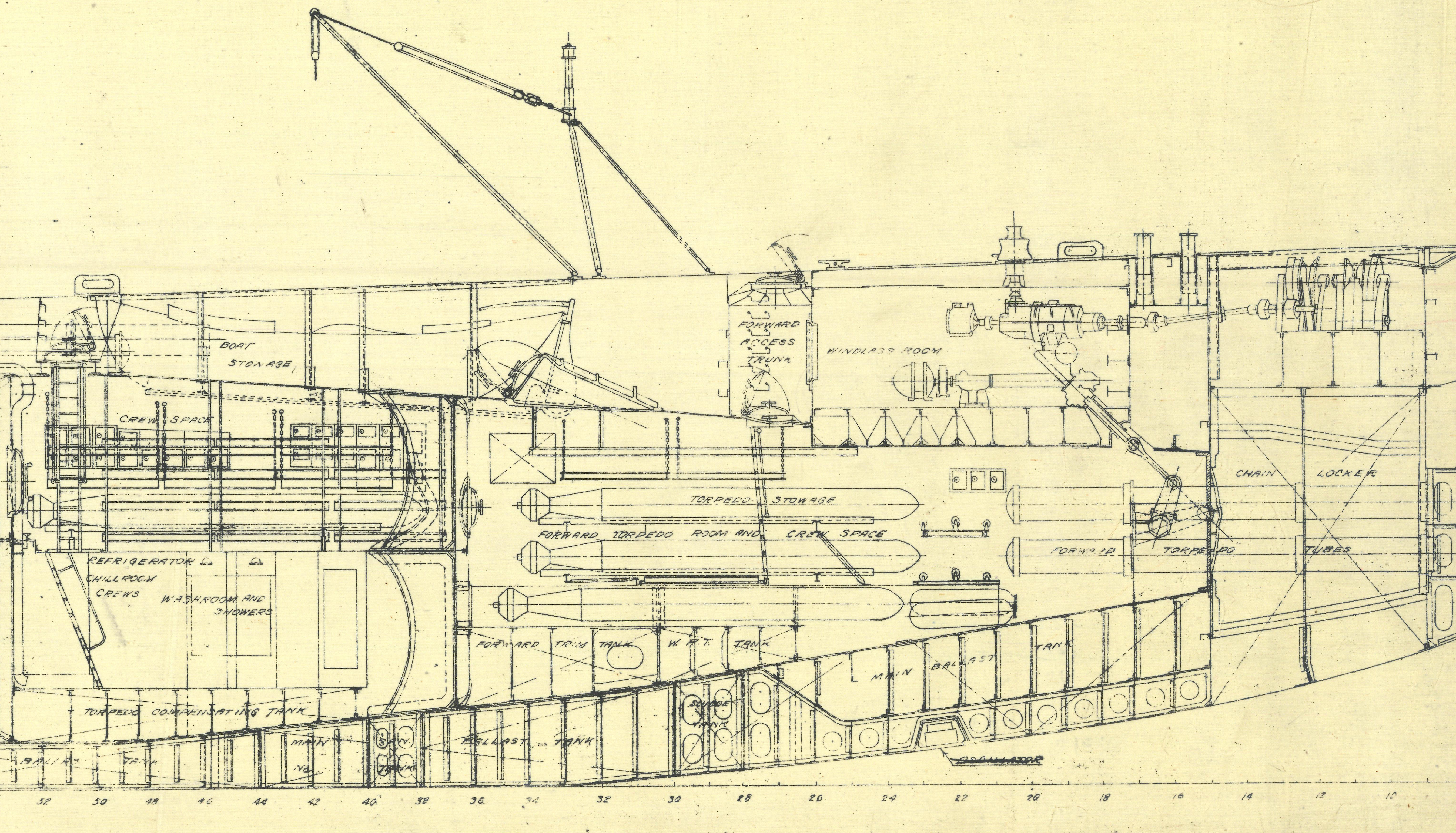

N.W.T.
SPACE
MAIN
TANK
BALLAST
No.
AFTER TORPEDO
TUBES
BASE LINE
220
218
A.P.
216
214
212
210
208
206
204
202
200

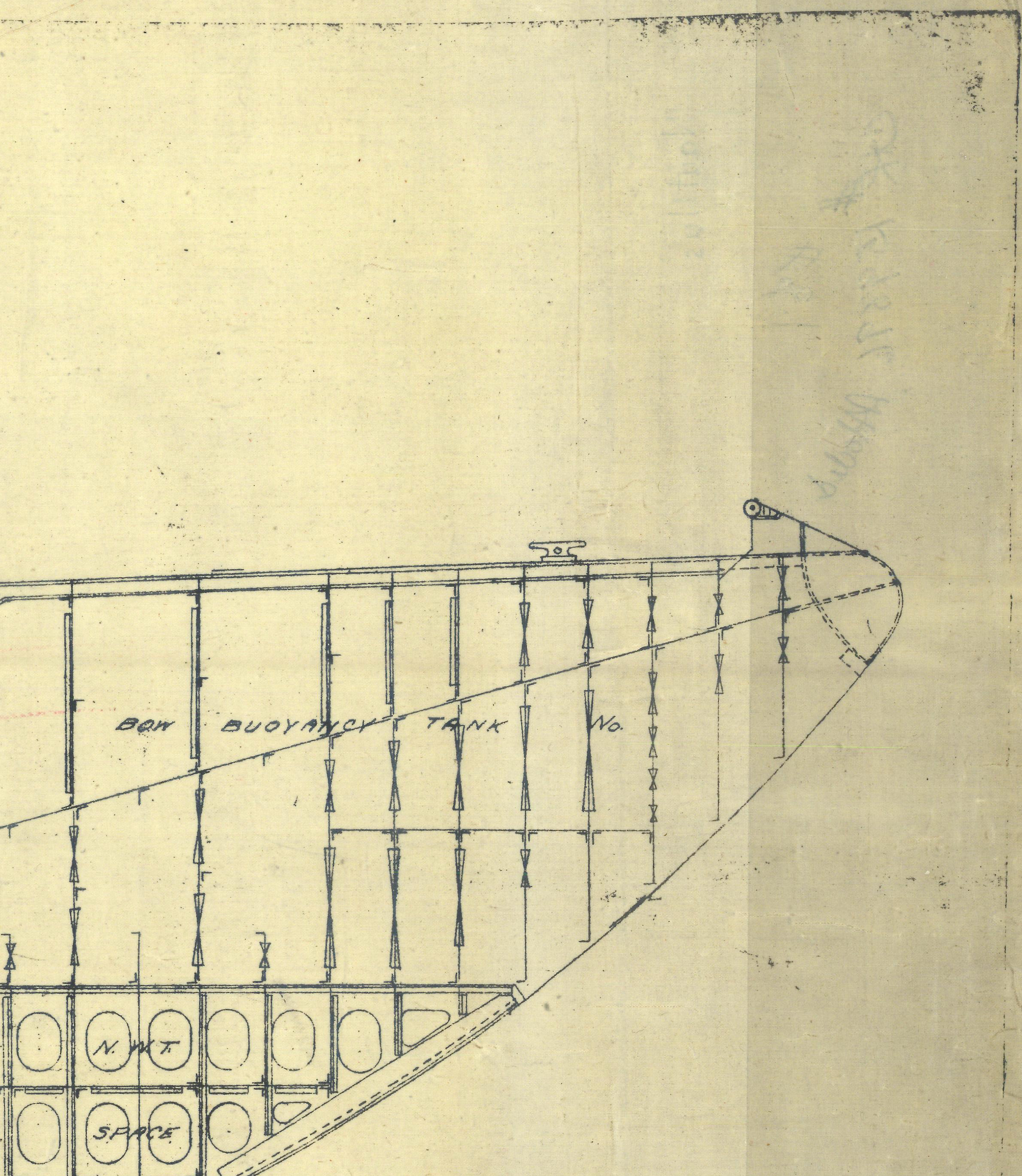

AFTER TORPEDO LOADING HATCH AND ESCAPE LOCK
CREW SPACE
W.C. AND
WASHROOM
MANEUVERING ROOM
MAIN POWER CONTROL
AFTER TORPEDO ROOM AND CREW SPACE
TORPEDO STOWAGE
W.R.T. TANK
TORP. COMPS. TANK
AFTER TRIM TANK
MAIN BALLAST TANK No.
MOTOR ROOM
REDUCTION GEAR & CLUTCH SUMP
LUB
MAIN BALLAST TANK No.
S.A.N. TANK
FUEL OIL TANK No.
FUEL OIL TANK No.
198
196
194
192
190
188
186
184
182
180
178
176
174
172
170
168
166
164
162
160
158
156
154
152


"A" FRAME
CUT OFF
6/5/42

OPEN
BRIDGE
6" GUN
AFTER
GUN
ACCESS
TRUNK
ENGINE ROOM
CREWS MESS AND C.P.O. QUARTERS
AFTER BATTERY SPACE
AIR FLASK STO
OIL STOWAGE
FUEL OIL TANK
No.
FUEL OIL TANK
No.
SUMP TANK
FUEL OIL TANK
No.
AUXILIARY BALLAST TANK
150
148
146
144
142
140
138
136
134
132
130
128
126
124
122
120
118
116
114
112
110
108
106


NOT INSTALLED
6/5/42
PELORUS
BINNACLE
NAVIGATING BRIDGE
PILOT HOUSE
6" GUN
CONNING TOWER
FORWARD GUN ACCESS TRUNK
CONTROL ROOM
GALLEY
SHIPS OFFICE
WARDROOM, OFFICERS STATE ROOMS
W.C. WASHROOM AND SHOWERS
FORWARD BATTERY SPACE
HANDLING ROOM
SMALL ARMS MAGAZINE
FRESH WATER TANK
PUMP ROOM
FRESH WATER TANK
FUEL OIL TANK No.
SUMP TANK
MAIN BALLAST TANK No.
MAIN BALLAST TANK No.
No.
MAIN
102
100
98
96
94
92
90
88
86
84
82
80
78
76
74
72
70
68
66
64
62
60
58
56
54

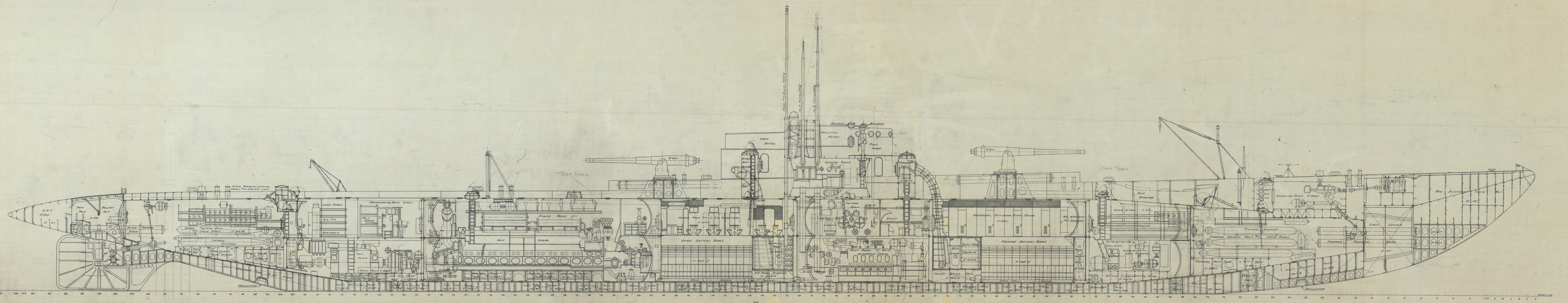

BOAT STOWAGE
CREW SPACE
FORWARD ACCESS TRUNK
WINDLASS ROOM
CHAIN LOCKER
TORPEDO STOWAGE
FORWARD TORPEDO ROOM AND CREW SPACE
FORWARD TORPEDO TUBES
REFRIGERATOR & CHILLROOM
CREWS WASHROOM AND SHOWERS
FORWARD TRIM TANK
W.R.T. TANK
MAIN BALLAST TANK
TORPEDO COMPENSATING TANK
BALLA TANK
MAIN BALLAST TANK No.
SAN. TANK
SLUDGE TANK
OSCILLATOR
52
50
48
46
44
42
40
38
36
34
32
30
28
26
24
22
20
18
16
14
12
10


BOW BUOYANCY TANK No.
N.W.T.
SPACE
BASE
8
6
4
2
F.P.
A
B
C
D
E
F

NAUTILUS

PRELIMINARY
INB'D PROFILE
CORRECTED

attached to Plan
Bu No. 159896



N.W.T. SPACE D-4V
MAIN BALLAST TANK No. 7 D-3W
AFTER TORPEDO TUBES
AFTER TORPEDO LOADING HATCH AND ESCAPE LOCK
AFTER TORPEDO ROOM AND CREW SPACE D-302 BL
TORPEDO STOWAGE
W.R.T. TANK D-903 W
TORP. COMP'S TANK D-904 W
AFTER TRIM TANK D-901 W
MAIN BALLAST TANK No. 6D D-2W
OSCILLATOR
BASE LINE
A.P.
CREW SPACE
W.C. AND WASHROOM
MANEUVERING ROOM D-301L
MAIN POWER CONTROL
MAIN MOTOR
MOTOR ROOM C-406E
LUB. OIL TANK No. 4 C-925F
MAIN BALLAST TANK No. 6B C-26W
FUEL OIL TANK No. 13 C-926F
FUEL OIL TANK No. 12 C-922F
ENGINE ROOM C-1
MAIN ENGINE
LUB. OIL TANK No. 3 C-923F
LUB. OIL TANK No. 2 C-920F
LUB. OIL TANK No. 1 C-917F
FUEL OIL TANK No. 9 C-918F
FUEL OIL TANK No. 8 C-914F
SUMP TANK C-914F
FUEL OIL TANK No. 5 C-912F
AUXILIARY BALLAST TANK No. 6 C-910W
PUNT STOW.
TORP TUBES
6" GUN
CREWS MESS AND C.P.O. QUARTERS C-302L
AFTER BATTERY SPACE
C-405E
AFTER GUN ACCESS TRUNK C-302T
HANDLING ROOM C-408M
AIR FLASK STOWAGE C-908A
MAIN DRAIN TUNNEL
FUEL OIL TANK No. 1
SUMP TANK C-906F
OPEN BRIDGE
RADIO AND SIGNAL MAST
No. 3 PERISCOPE
No. 2 PERISCOPE
PELORUS
BINNACLE
NAVIGATING BRIDGE
PILOT HOUSE
CONNING TOWER
CONTROL ROOM C-301C
GALLEY
FORWARD GUN ACCESS TRUNK C-201T
PUMP ROOM C-401E
GENERATOR ENGINE
FUEL OIL TANK No. 4
SHIPS OFFICE
HANDLING ROOM A-407M
SMALL ARMS MAGAZINE A-404M
FRESH WATER TANK A-906W
WARDROOM, OFFICERS STATE ROOMS A-302L
FORWARD BATTERY SPACE
A-403E
W.C., WASHROOM AND SHOWERS
MAIN BALLAST TANK No. 2F A-12W
MAIN BALLAST TANK No. 2D A-10W
MAIN BALLAST TANK No. 2B A-8W
6" GUN
TORP TUBES
BOAT STOWAGE
CREW SPACE A-301L
REFRIGERATOR, CHILL ROOM
CREWS WASHROOM AND SHOWERS
TORPEDO COMPENSATING TANK A-905W
FRESH WATER TANK A-402W
O.U.T.
NEW IN ENG RM
MAIN BALLAST TANK No. 1B A-6W
FORWARD ACCESS TRUNK
WINDLASS ROOM A-202E
TORPEDO STOWAGE
FORWARD TORPEDO ROOM AND CREW SPACE
FORWARD TRIM TANK A-903W
W.R.T. TANK A-901W
GASOLINE TANK A-902G
MAIN BALLAST TANK No. 1A A-4W
OSCILLATOR
CHAIN LOCKER
FORWARD TORPEDO TUBES A-2W
BOW BUOYANCY TANK No. 1 A-1W
N.W.T. SPACE
BASE LINE
F.P.
A
B
C
D
E
F

ALTERATIONS.				
MARK	DATE	DESCRIPTION.	BY.	APPROVED.

PLAN NOT CORRECTED DURING MODERNIZATION
AT M.I. - SEE C.B. IN THIS ROLL
10/1/42 V.F

THIS PLAN CONVERTED FROM PORTSMOUTH PLAN No. 14995C1.

SS168

U.S.S. NAUTILUS - SUBMARINE - ~~V-6.~~ N-2 #168
INBOARD PROFILE.

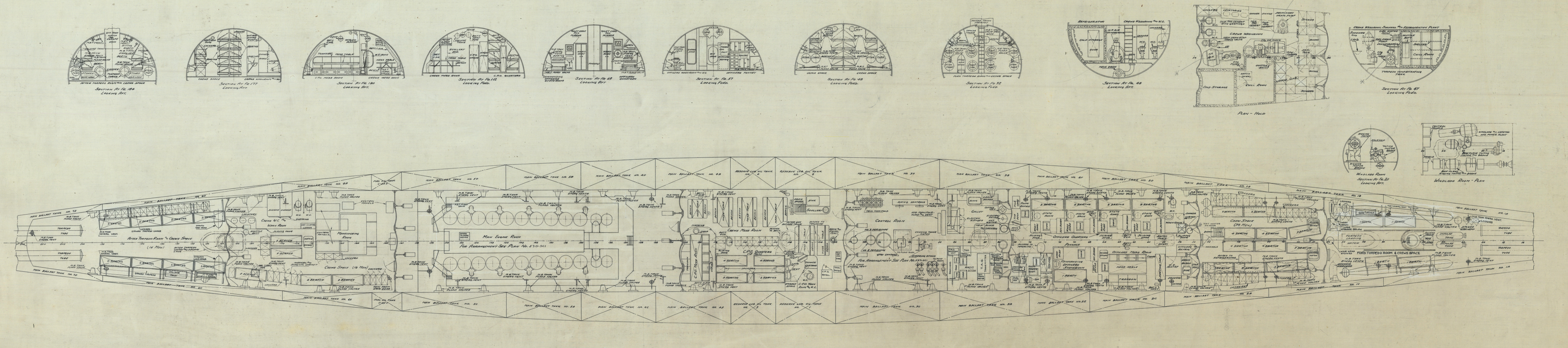
A. V. B. Madsen LIEUT. (JG)(CC) U.S.N.
ACTING DESIGN SUPERINTENDENT.

DELINEATOR.- CONVERTED BY G.C.R.
CHECKER.- C.P.Y.
SUPERVISOR.- J.B. Lanham
BUREAU- C.&R.
No.-159896.

CHIEF DRAFTSMAN.- D.W. Brown
SCALE.- 1/4" = 1 FOOT
DATE.- AUGUST 28, 1931
U.S. NAVY YARD, MARE ISLAND, CALIF.
No.-40063.

SS167/S1-3
SS168/S1-3
Ser. 318 0235/46
SS168/S1-3

Jog #87


After Torpedo Room and Crews Space
Section At Fr. 184
Looking Aft.
Crews Space
Crews Washroom and W.C.
Section At Fr 177
Looking Aft.
C.P.O. Mess Room
Crews Mess Room
Section At Fr. 120
Looking Aft.
Crews Mess Room
C.P.O. Quarters
Section At Fr. 112
Looking Ford.
Commanding Officers Stateroom
Officers Quarters
Section At Fr. 69
Looking Aft
Officers Washroom and W.C.
Officers Pantry
Section At Fr. 57
Looking Ford.
Crews Space
Section At Fr. 48
Looking Ford.
Ford. Torpedo Room and Crews Space
Section At Fr 32
Looking Ford.
Refrigerator
Crews Washroom and W.C.
Cold Storage
Main Drain
Section At Fr. 48
Looking Aft.
Lockers
Lavatories
Shower
Crews Washroom
Cold Storage
Chill Room
Plan - Hold
Crews Washroom, Showers and Refrigeration Plant
Chill Room
Torpedo Compensating Tank
Section At Fr. 47
Looking Ford.
Windlass Room
Section At Fr. 20
Looking Aft.
Windlass Room - Plan
Main Ballast Tank No. 4B
Reserve Lub. Oil Tank No. 4
Reserve Lub. Oil Tank No. 3
Main Ballast Tank No. 3D
Main Ballast Tank No. 3B
Main Ballast Tank No. 2F
Main Ballast Tank No. 2D
Main Ballast Tank No. 2B
Main Ballast Tank No. 1B
After Torpedo Room and Crews Space
Crew Space (14 Men)
Main Engine Room
For Arrangement See Plan
Crews Mess Room
Control Room
Galley
Scullery
Officers Quarters
State Room
2 Berths
Crew Space (34 Men)
Ford. Torpedo Room & Crews Space

ALTERATIONS

MARK	DATE	DESCRIPTION	BY	APPROVED

PLAN NOT CORRECTED DURING MODERNIZATION AT M.I.-SEE C&R PLAN 159886-SHEETS 4,6 & 7
10/1/42 V.F.

55167/S1-3
55168/S1-3
3180235/46

GENERAL NOTES

THIS PLAN CONVERTED FROM PORTSMOUTH PLAN NO. 471-SCI

55168

U.S.S. NAUTILUS SUBMARINE ~~V-6~~ N-2
JOINER PLAN
PLATFORM AND HOLD

H. V. B. Madsen LIEUT. J.G.(C.C.) U.S.N.
ACTING DESIGN SUPERINTENDENT

DELINEATOR - CONVERTED BY D.M.B.	CHIEF DRAFTSMAN D. B. Brown
CHECKER C.P.Y.	SCALE: 1/4" = 1 FOOT
SUPERVISOR J. B. Lanham	DATE AUGUST 28, 1931
BUREAU C.&R.	U.S. NAVY YARD, MARE ISLAND, CALIF.
№ 159858	№ 31614

55168/S11-6
E8

PRINCIPAL DIMEMSIONS

LENGTH OVER ALL	370'-7¼"
LENGTH BETWEEN PERPENDICULARS	355'-0"
PROJECTION FORWARD OF F.P.	11'-7¼"
PROJECTION AFT OF A.P.	4'-0"
LENGTH ON STRAIGHT KEEL	225'-6"
BREADTH MOULDED	33'-2¾"
BREADTH EXTREME	33'-3½"
DRAFT-SURFACEE CONDITION TO UNDER SIDE OF KEEL PLATES	17'-0"

HEIGHTS

LOWEST POINT OF KEEL TO TOP OF STRENGTH HULL AMIDSHIPS ON CENTER LINE.	22'-11"
LOWEST POINT OF KEEL TO TOP OF BRIDGE DK.	- FORD. 34'-1¼" AFT. 35'-9"
LOWEST POINT OF KEEL TO TOP OF CONNING TOWER PLATING AMIDSHIPS ON CENTERLINE.	32'-11¼"
LOWEST-POINT OF KEEL TO TOP OF PERISCOPE FAIRWATER NO. 2 AND 3 POSITIONS.	42'-1¼"
LOWEST-POINT OF KEEL TO TOP OF HIGHEST PERISCOPE EXTENDED. (OPTICAL CENTER)	70'-9"

COMPLEMENT

COMMANDING OFFICER	1
EXECUTIVE OFFICER	1
WARDROOM OFFICERS	6
TOTAL-OFFICERS	8
SEAMAN BRANCH	24
ARTIFICER BRANCH	15
ENGINE ROOM FORCE	30
SPECIAL BRANCH	3
COMMISSARY BRANCH	3
MESSMAN BRANCH	5
TOTAL-CREW	80

MAIN BALLAST TANKS

COMPARTMENT	TANK	CU. FT.	GALLONS	TONS S.W.	TONS OIL	CORR. FOR LEAD BALLAST TONS S.W.	95% CAP. FUEL OIL CORR. FOR LEAD BALLAST TONS
A-4W	1A	2380.00	17804	68.00			
A-6W	1B	970.90	7264	27.74			
A-5W	1C	970.90	7264	27.74			
★ A-7W	2A	1071.70	8017	30.62		1.09	
★ A-8W	2B	1071.70	8017	30.62		1.07	
★ A-9W	2C	1048.95	7847	29.97		0.61	
★ A-10W	2D	1048.95	7847	29.97		0.57	
A-11W	2E-F.B.T.	1153.25	8627	32.95	26.10	0.57	25.64
A-12W	2F-F.B.T.	1153.25	8627	32.95	26.10	0.57	25.64
C-3W	3A-FBT	1461.60	10934	41.76	33.08	1.23	32.11
C-2W	3B-FBT	1461.60	10934	41.76	33.08	1.07	32.24
C-17W	4A-FBT	1438.15	10758	41.09	32.55	1.58	31.30
C-16W	4B-FBT	1438.15	10758	41.09	32.55	1.60	31.27
★ C-19W	4C	1166.20	8724	33.32		1.12	
★ C-18W	4D	1166.20	8724	33.32		0.98	
C-21W	5A-FBT	1226.75	9177	35.05	27.76	0.93	27.03
C-20W	5B-FBT	1226.75	9177	35.05	27.76	0.93	27.03
C-23W	5C-FBT	1369.55	10245	39.13	31.00	0.16	30.87
C-22W	5D-FBT	1369.55	10245	39.13	31.00	0.19	30.84
C-27W	6A	977.90	7315	27.94		0.92	
C-26W	6B	977.90	7315	27.94		0.92	
D-1W	6C	1280.00	9575	36.57		0.69	
D-2W	6D	1280.00	9575	36.57		0.69	
D-3W	7	1632.05	12209	46.63			
SAFETY	8A	653.10	4886	18.66			
SAFETY	8B	653.10	4886	18.66			
TOTALS			236751	904.23	300.98	16.92	293.97

GASOLINE TANKS

COMPARTMENT	TANK	CU. FT.	GALLONS	TONS S.W.	TONS GAS	CORR. FOR LEAD BALLAST TANK S.W.	
C4 GAS	1	1292.00	9660	36.91	26.41	1.35	
C5 GAS	2	1292.00	9660	36.91	26.41	1.35	
TOTALS			19320	73.82	52.82	2.70	

VARIABLE BALLAST TANKS

COMPARTMENT	TANK	CU. FT.	GALLONS	TONS S.W.	TONS F.W.
A-901-W	WRT	219.80	1646	6.28	
A-903-W	F.T.	539.35	4032	15.41	
A-905-W	T.C.	430.85	3224	12.31	
C-9-W	AUX. #1	767.90	5745	21.94	
C-8-W	AUX. #2	767.90	5745	21.94	
C-13-W	AUX. #3	575.05	4301	16.43	
C-12-W	AUX. #4	575.05	4301	16.43	
C-909-W	AUX. #5	704.90	5274	20.14	
C-910-W	AUX. #6	704.90	5274	20.14	
D-901-W	A.T.	723.10	5408	20.66	
D-902-W	T.C.	253.05	1893	7.23	
D-903-W	W.R.T.	96.95	726	2.77	
NEG. BUOY.	TANK	398.30	2978	11.37	
TOTALS			50547	193.05	

SANITARY TANKS

COMPARTMENT	TANK	CU. FT.	GALLONS	TONS S.W.	TONS F.W.
A-902-W	SAN.	104.30	780	2.97	
A-904-W	SAN.	61.95	464	1.77	
C-901-W	SAN.	52.00	389	1.49	
C-924-W	SAN.	46.90	352	1.34	
TOTALS			1985	7.57	

FRESH WATER TANKS

COMPARTMENT	TANK	CU. FT.	GALLONS	TONS S.W.	TONS F.W.
A-402-W	F.W.	592.20	4430		16.45
A-906-W	F.W.	324.72	2430		9.02
BATT. FWD. (6)	F.W.	136.44	1020		3.79
BATT. AFT. (6)	F.W.	136.44	1020		3.79
TOTALS			8900		33.05

BUOYANCY TANKS

COMPARTMENT	TANK	CU. FT.	GALLONS	TONS S.W.	TONS F.W.
BOW-A-1W	1	1240	9276		35.43
BOW-A-203W	2	1880	14063		53.71
TOTALS			23339		89.14

FUEL OIL TANKS

COMPARTMENT	TANK	CU. FT.	GALLONS	TONS S.W	TONS OIL
C-904-F	1	619	4630	17.69	14.75
C-905-F	2	619	4630	17.69	14.75
C-903-F	3	319	2390	9.13	7.61
C-902-F	4	283	2120	8.10	6.75
C-912-F	5	361	2700	10.31	8.60
C-911-F	6	361	2700	10.31	8.60
C-915-F	7	390	2920	11.15	9.30
C-916-F	8	390	2920	11.15	9.30
C-918-F	9	461	3450	13.18	10.99
C-919-F	10	461	3450	13.18	10.99
C-921-F	11	592	4430	16.92	14.11
C-922-F	12	592	4430	16.92	14.11
C-24-F	13	441	3300	12.61	10.51
C-25-F	14	441	3300	12.61	10.51
TOTALS			47370	180.95	150.88

CLEAN FUEL OIL TANKS 95% CAP.

COMPARTMENT	TANK	CU. FT.	GALLONS	TONS S.W	TONS OIL
C-907-F	C.F.O.	52	390	1.49	1.24
C-914-F	C.F.O.	197	1470	5.61	4.68
TOTALS			1860	7.10	5.92

LUB. OIL TANKS 95% CAPACITY

COMPARTMENT	TANK	CU. FT.	GALLONS	TONS S.W	TONS OIL
C-906-F	1	52.14	390		1.34
C-913-F	2	196.54	1470		5.05
C-917-F	3	99.74	746		2.56
C-923-F	4	180.09	1347		4.63
C-925-F	5	115.65	865		2.97
C-926-F	6	104.15	779		2.68
TOTALS			5597		19.23

PROP. THRUST. BEAR. L. O. SUMPS

COMPARTMENT	TANK	CU. FT.	GALLONS	TONS S.W	TONS OIL
D-401-F	1	21.26	159		0.55
D-402-F	2	21.26	159		0.55
TOTALS			318		1.10

RESERVE LUB. OIL TANKS 95% CAP.

COMPARTMENT	TANK	CU. FT.	GALLONS	TONS. F.O.
C-11-F	1	358.18	2680	9.21
C-10-F	2	358.18	2680	9.21
C-15-F	3	268.07	2005	6.89
C-14-F	4	268.07	2005	6.89
TOTALS			9370	32.20

LUB. OIL SUMPS 75% CAP.

COMPARTMENT	TANK	CU. FT.	GALLONS	TONS. F.O.
C-927-F	MN ENG #1	77.68	581	1.99
C-928-F	MN ENG #2	77.68	581	1.99
C-929-F	MN ENG #3	84.36	631	2.17
C-930-F	MN. ENG. #4	84.36	631	2.17
C-931-F	RED. GEAR #5	58.83	439	1.51
C-932-F	RED. GEAR #6	51.34	384	1.32
TOTALS			3247	11.15

★ TANKS COMPENSATED FOR AIR FLASKS.

HOSE CONNECTIONS (WATER)

NAME	LOCATION	NO	SIZE	NAME	LOCATION	NO	SIZE
FIRE & WASH DK. HOSE	FORD. TORP. RM.	1	1½"	FIRE & WASH DK. HOSE	AFT TORP. RM.	1	1½"
FIRE & WASH DK. HOSE	FORD. CREWS SPACE	1	1½"	FIRE & WASH DK. HOSE	AFT CREWS SPACE	1	1½"
FIRE & WASH DK. HOSE	OFFICERS QUARTERS	1	1½"	FIRE & WASH DK. HOSE	DECK - FORD.	1	1½"
FIRE & WASH DK. HOSE	CONTROL ROOM	1	1½"	FIRE & WASH DK. HOSE	DECK - AMID.	1	1½"
FIRE & WASH DK. HOSE	C.P.O. QTS. & CREWS MESS	1	1½"	FIRE & WASH DK. HOSE	DECK - AFT.	1	1½"
FIRE & WASH DK. HOSE	ENGINE RM.	1	1½"				

HOSE CONNECTIONS (AIR)

NAME	LOCATION	NO	SIZE
MAIN BALLAST TANK AIR SALVAGE	CONNING TOWER FAIRWATER - STBD. SIDE	1	2½"
COMPARTMENT AIR SUPPLY SYSTEM	CONNING TOWER FAIRWATER - AFT.	1	2½"
COMPARTMEMT AIR SALVAGE	FORWARD TORPEDO ROOM	2	1¼" I.P.S.
COMPARTMENT AIR SALVAGE	WINDLASS ROOM	1	1¼" I.P.S.
COMPARTMENT AIR SALVAGE	CREWS SPACE - FORWARD	2	1¼" I.P.S.
COMPARTMENT AIR SALVAGE	OFFICERS QUARTERS	2	1¼" I.P.S.
COMPARTMENT AIR SALVAGE	CONTROL ROOM	2	1¼" I.P.S.
COMPARTMENT AIR SALVAGE	CONNING TOWER	1	1¼" I.P.S
COMPARTMENT AIR SALVAGE	C.P.O. QUARTERS AND CREWS MESS	2	1¼" I.P.S.
COMPARTMENT AIR SALVAGE	ENGINE ROOM	2	1¼" I.P.S.
COMPARTMENT AIR SALVAGE	MANEUVERING ROOM AND CREWS SPACE	2	1¼" I.P.S.
COMPARTMENT AIR SALVAGE	AFTER TORPEDO ROOM	2	1¼" I.P.S.

SS167/S1-3
SS168/S1-3
318023 5/46

Tag #17

C & R Nº 159886

U.S.S. SS168
TANK CAPACITIES AND
GENERAL DATA

SHEET NO. 2

SS168/S1-7